

What is claimed is:

1. A quality inspection method for inspecting quality of a finally shaped container obtained by forming a web-like packaging laminated material having folding lines in tube shape, longitudinally sealing the packaging material in the longitudinal direction, filling food into the tube-shaped packaging material, pressing the packaging material at every predetermined interval in the crossing direction and sealing by the transversal seal, cutting at the middle of the transversal seal zone and obtaining a pillow-like preliminary forming, and sealing a flap formed by folding along the folding line to the container side wall and/or a container bottom face, comprising:

rotating the flap sealed to the container wall around a ridge side where the flap integrally communicates with the container wall to peel the flap from the container wall;

returning to a shape of the pillow-like preliminary forming;

cutting the container wall to extract the filled food;

developing the cut container to prepare a sampled body;

measuring an edge of the transversal seal zone on the inside of the container over the whole length of the outer surface of the edge for unevenness of the outer surface by a detecting unit; and

judging acceptability of the transversal seal zone based on signals from the detecting unit by an analyzing unit.

2. The quality inspection method according to claim 1, wherein said detecting unit emits illumination light to the outer surface of the edge of the transversal seal zone from a plurality of directions, and said analyzing unit which is an image processing unit receives images of reflected/scattered light reflected or scattered from the outer surface of the edge to perform analysis processing.

3. The quality inspection method according to claim 1, wherein said detecting unit suspends a contact element onto the outer surface of the edge on the transversal seal zone and scans over whole length of the outer surface, and said analyzing unit analyses contact degree between the outer surface of the edge and the contact element.

4. A quality inspection device for inspecting quality of a finally shaped container obtained by forming a web-like packaging laminated material having folding lines in tube shape, longitudinally sealing the packaging material in the longitudinal direction, filling food into the tube-shaped packaging material, pressing the packaging material at every predetermined interval in the crossing direction and sealing by the transversal seal, cutting at the middle of the transversal seal zone to obtain a pillow-like preliminary forming, and sealing a flap formed by folding along the folding line to the container side wall and/or a container bottom face, comprising:

a pre-processing unit for rotating the flap sealed to the container wall around a ridge side in which the flap integrally communicates with the container wall to peel the flap from the container wall, and for returning to a shape of the pillow-like preliminary forming;

a cutting unit for cutting the container wall to extract the filled food;

a preparing unit for developing the cut container to prepare the desired sampled body;

a detecting unit for measuring the edge of the transversal seal zone on the inside of the container for unevenness of the outer surface over whole length of the outer surface of the edge, and,

an analyzing unit for judging an acceptability of the transversal seal based on signals from the detecting unit.

5. The quality inspection device according to claim 4, wherein said detecting unit

is illumination light emitted onto the outer surface of the edge on the transversal seal zone from a plurality of directions, and said analyzing unit is an image processing unit to receive image of reflected/scattered light reflected or scattered from the outer surface of the edge, and analyze and process.

6. The quality inspection device for inspecting quality according to Claim 4, wherein said detecting unit is a contact element suspended on the outer surface of the edge of the transversal seal zone and scanning over whole length of the outer surface, and said analyzing unit is a contact analyzing processing unit to analyze and process contact degree between the outer surface of the edge and the contact element.